



Release Notes

Product: IBM Security Guardium
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IBM Security Guardium is designed to help safeguard critical data.

Guardium is a comprehensive data protection platform that enables security teams to automatically analyze sensitive-data environments such as databases, data warehouses, big data platforms, cloud environments, file systems, mainframes, IBM Z®, IBM i platforms, and so on.

Guardium minimizes risk, protects sensitive data from internal and external threats, and seamlessly adapts to IT changes that may impact data security. It ensures the integrity of information in data centers and automates compliance controls like GDPR, HIPAA, SOX, PCI, and others.

Guardium provides a suite of programs organized around components and modules:

- IBM Security Guardium Appliances
- IBM Security Guardium Data Security and Compliance
 - IBM Security Guardium Data Protection
 - IBM Security Guardium Data Activity Monitor
 - IBM Security Guardium Vulnerability Assessment
- IBM Security Guardium for Files
 - IBM Security Standard Activity Monitor for Files
 - IBM Security Advanced Activity Monitor for Files
- IBM Security Guardium Data Protection for NAS
- IBM Security Guardium Data Protection for SharePoint
- IBM Security Guardium Multi-Cloud Data Protection

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Guardium 10.6 - Installing and Upgrading

Read through this document before you begin installation.

ISO or GPU:

For Guardium release v10.6, the software is available as an ISO product image from Passport Advantage and as a GPU from Fix Central.

Passport Advantage:

ibm.com/software/howtobuy/passportadvantage/pao_customers.htm

On Passport Advantage (PA), you'll find the Guardium Product Image - ISO file, licenses, product keys, and manuals. You may only download the products that your site is entitled.

If you need assistance finding or downloading a product from the Passport Advantage site, contact the Passport Advantage team at 800-978-2246 (8:00 AM - 8:00 PM EST) or by email paonline@us.ibm.com.

Fix Central:

ibm.com/support/fixcentral

On Fix Central, you'll find Guardium Patch Update files (GPUs), individual patches and the current versions of STAP and GIM.

If you need assistance finding a product on Fix Central, contact Guardium support.

Upgrading to v10.6

v10.6 (v10.0 GPU 600) can be installed on any v10.x system regardless of whether it was upgraded from v9.x or built from an earlier v10.x image.

The only dependency is that v10.0 Health Check patch 9997 must be successfully installed before installing the Guardium v10.6 (v10.0 GPU 600). See the section [Health Check patch](#).

v10.6 (v10.0 GPU 600) includes all previous [v10.x fix packs](#), [security fixes](#) and [sniffer patches](#).

To help speed up this upgrade, Guardium customers must backup, archive and purge the appliance data as much as possible. During GPU upgrades, the appliance's internal database will shut down. Depending on the size of the database, it might take an extended amount of time to restart. During this time, CLI access will only be available in recovery mode.

In recovery mode, the following CLI message will display:

The internal database on the appliance is currently down and CLI will be working in 'recovery mode'; only a limited set of commands will be available.

Important: Do NOT reboot the system during the internal database upgrade.

For real-time details on the system patch installation, use the CLI command `show system patch status`. For v10.6, you can run this command in the CLI recovery mode, but only after a certain point in the v10.0 GPU 600 installation when the CLI command gets added.

Note for appliances upgrading from v10.1.2 and lower:

When using the GUI (fileserver method) to upload GPU 600, there is a risk of time out because of the large file size.

Recommendation: Use the CLI command `system patch install`. For more information on this command, see [Store system patch install](#).

Health Check patch

The v10.0 Health Check patch 9997 must be successfully installed in the last seven days before installing Guardium v10.6 (v10.0 GPU 600).

If the Health Check patch isn't installed as recommended, GPU 600 will fail with this error message:
Patch Installation Failed - Latest patch 10.0p9997 required.

The Health Check file is a compressed file with the file name in this format:
SqlGuard_10.0p9997_HealthCheck_<date>.zip.

Note: Always use the latest and newest version of Health Check patch on Fix Central, even if you have the Health Check patch from earlier GPUs.

General Notes

This GPU patch will restart the appliance.

Installation must be scheduled during a "quiet" time on the Guardium appliance to avoid conflicts with other long-running processes such as heavy reports, audit processes, backups and imports.

Purge as much unneeded data as possible for an easier installation process.

If the downloaded package is in .ZIP format, customers are required to extract it outside the Guardium appliance before uploading or installing it.

To avoid aggregator merge issues, install this patch both on a collector and corresponding aggregator appliance.

Important: Installation must be across all the appliances: central manager, aggregators, and collectors.

Installing or upgrading to 10.6 Windows S-TAP

Fresh install of v10.6 - no reboot required

Upgrading from v9 to v10.6 - no reboot required

Upgrading from v10.0 and build lower than 83909 - reboot is required

Upgrading from v10.1.x (revisions lower than Windows STAP v10.1.22.16) - reboot is required

New Features and Enhancements

Guardium v10.6 introduces new features and enhancements.

UI-Based Enhancements

Policy builder for data

The new policy builder simplifies policy management with enhancements like sorting and filtering by properties, exporting CSVs with policy and rule properties, and dedicated collection profile rule types. For more information, see [Policies](#).

Session-level policies

Support for session-level policies improves policy processing for rules that fire on session or access level information. It works with both UNIX and Windows S-TAPs. See [Session-level Policies](#).

Outliers Mining

New default dashboards to assist investigating outlier findings, support for environments with multiple central managers, a simplified API for enabling and disabling, and an enhanced outlier mining status page. For more information, see [Outliers Detection](#).

Query-report builder

The new query-report builder combines the legacy report and query builders into a simplified workflow where each query represents one corresponding report. For more information, see [Using the Query-Report Builder](#).

Disk and Database Health Analyzer

In addition to monitoring, Guardium now predicts database sizes and files on disk (/var). When it identifies a database whose size, or files on disk (/var), might potentially reach 50 percent in the next 14 days, it sends alerts. Alerts also appear in the deployment health dashboard of the central manager. See [Self-Monitoring](#).

Guardium Logins Report:

The Guardium Logins report now displays the CLI user name, the login date and time, logout date and time and remote host information for both successful and failed logins. The report previously captured only GUI logins. To access this report through the GUI, navigate to Reports > Monitoring of Guardium System > Guardium Logins.

Cloud Deployment

External S-TAP

Guardium External S-TAP intercepts traffic for cloud and on-premises database services without installing an agent on the database server. This component is available as a Docker image and can be deployed anywhere. For more information about installing and using External S-TAP, see [External S-TAP](#). For the External S-TAP Docker image, go to [Docker store External S-TAP](#).

GIM

GIM Enhancements

Set up by Client enhancements: GIM group builder and Generate API function. Ability to see installed modules when choosing the client. See [Setup by Client](#).

Vulnerability Assessment

Vulnerability Assessment support for multi-threading

Vulnerability assessment support for multi-threading reduces scan time by scheduling and running multiple security assessments in parallel, allowing you to run two concurrent scans for each CPU core. For more information, see [Multi-thread Assessment](#).

Windows S-TAP

FAM MS-Office events consolidation

Guardium can filter out the extraneous, irrelevant MS Word, Excel, and PowerPoint file activities from FAM monitoring. See [Configuring consolidation of FAM MS Office events](#).

Firewall

The Windows parameter, `firewall_default_state`, has a new state that uses session level policies for decisions, reducing latency and improving performance. See [firewall_default_state for Windows S-TAP](#).

Pre-kernel Dump Verification

S-TAP now comes packaged with a pre-kernel dump verification utility called System Verification Tool. This tool helps customers determine if their dump settings in the registry are configured correctly so that a kernel dump can be successfully performed. For more information, see [Pre-Kernel dump verification utility for Windows S-TAP](#).

UNIX S-TAP

S-TAP Resilience

S-TAP resilience identifies user configuration errors that S-TAP could not validate. The S-TAP remains connected to Guardium appliance even if the user made significant mistakes in the configuration. In this case, the STAP control status will be yellow. Access the Event Log from the S-TAP Control page to view and rectify the errors. See [Linux and UNIX systems: Configure S-TAP from the GUI](#).

DB2 exit health check script

The DB2 exit health check script gathers information from the DB2 server, used for configuring and troubleshooting the DB2 IEs. See [DB2 Exit integration with S-TAP S-TAP is not capturing DB2 exit traffic](#).

Exit libraries

When upgrading S-TAP with an exit library to 10.6, the database still requires restart. However, when upgrading v10.6 S-TAP to a higher version, an immediate database restart would no longer be required. See [Linux and UNIX systems: Using Exit Libraries](#).

Cassandra auditing

Cassandra auditing can log to a file appender. See [Linux and UNIX systems: Configure Cassandra auditing to log to a FileAppender](#).

Firewall

The UNIX S-TAP parameter, `firewall_default_state`, has a new state that uses session level policies for decisions, reducing latency and improving performance. See [Firewall](#).

File Activity Monitor (FAM)

FAM for GDPR

A new FAM for GDPR accelerator provides policies, discovery and classification, and reports for GDPR readiness. For more information, see [FAM Accelerator overview](#).

FAM for NAS and SharePoint

FAM adds a new feature to monitor and audit SharePoint servers and network-attached storage devices in the Windows environment. For more information, see [File Activity Monitor for NAS and SharePoint](#).

CAS (Configuration Auditing System)

CAS Installer

CAS joins the other Guardium agents on Windows servers with a new .NET installer. See [Installing CAS](#).

Additional Enhancements

Oracle Datasource

Guardium 10.6 supports datasource connections with SSL with server-signed and mutual authentication. SSL connections can be initiated using either the DataDirect or Oracle JDBC driver.

Guardium Password Enhancements:

Stronger Passwords:

Guardium GUI passwords are now compliant with STIG rule APP3320. Admins can enable strong password compliance using the CLI command `strong_password_enable`. Note: This feature is enforced on local Guardium appliance users only. Admins who have configured LDAP won't see the new behavior changes for strong passwords.

Password Hashing:

User passwords for the Guardium GUI are now hashed with a stronger password hashing algorithm that's compliant with industry standards.

LDAP Authentication:

Guardium now supports LDAP authentication. Customers using LDAP will no longer need to create separate local user IDs. The local user & password will be the LDAP user & LDAP password. Note: Upgrading customers must delete existing local users using the `setguiuser` CLI command.

For more information on passwords, see [User Account, Password and Authentication CLI Commands](#).

GDPR readiness

Follow these guidelines to configure your Guardium system for GDPR readiness: [GDPR Readiness](#).

Discover sensitive data

The discover sensitive data tool replaces the classification policy builder and classification process builder and adds support for reusing both policies and audit processes. For more information, see [Discover Sensitive Data](#).

TSM (Tivoli Storage Manager) v7.1.8

Guardium now supports TSM v7.1.8. To configure TSM Archive or backup, see [Configure TSM v7.1.8](#).

SAN (Subject Alternative Name) Support:

SAN support has been added to the CLI commands: `create csr alias`, `create csr external_stap`, `create csr gim` and `create csr gui`. There are ten SAN slots for each CSR generation command. Nine of the SANs are optional and can be added in FQDN (Fully Qualified Domain Name) format. The first SAN slot is reserved for CN- Common Name. For usage information, see [Certificate CLI commands](#).

Vulnerability Assessment

1) MySQL CIS Benchmark

IBM Guardium Vulnerability assessment supports CIS's latest MySQL 5.6 & 5.7 benchmark version 1.0 & 1.1 in v10.6. The external references of all relevant MySQL tests have been updated and mapped to the CIS MySQL 5.7 benchmark.

There are 40 new query-based tests that have been introduced in the 2018 Q4 DPS.

To download the CIS benchmark, use the following URL: <https://www.cisecurity.org/cis-benchmarks/>

2) VA scans with the latest STIG benchmark

Guardium 10.6 VA now supports STIG's latest DB2 10.5 benchmark version 1, release 1. For further information on the benchmark, see <https://iase.disa.mil/stigs/app-security/database/Pages/index.aspx>

You must execute the latest *gdmmonitor-db2.sql* script to run DB2 LUW VA as there are additional privilege requirements to execute these tests.

For more details, see [Database privileges for Vulnerability Assessment](#).

There are 28 new query-based tests that have been introduced and already available as of the 2018 Q2 DPS. 3 new CAS tests are available for v10.6. The 10.6 CAS agent must be installed to utilize the new CAS tests.

Query-based tests:

TEST_ID	TEST_DESC
2621	Access To External Executables Must Be Restricted
2622	Audit Policy CHECKING Category
2623	Audit Policy CONTEXT Category
2624	Is Audit Policy ERRORTYPE Set to A
2625	Audit Policy EXECUTE Category
2626	Audit Policy EXECUTEWITHDATA is Enabled
2627	Audit Policy OBJMAINT Category
2628	Audit Policy SECMAINT Category
2629	Audit Policy SYSADMIN Category
2630	Audit Policy VALIDATE Category
2631	Audit On System Catalog Authority objects
2632	CONNECT_PROC is Defined
2633	Audit Routine Execute Privileges
2634	Routine Ownership
2635	Package Ownership
2636	Module Ownership
2637	Trigger Ownership
2638	Tablespace Ownership
2639	Table Ownership
2640	Schema Authority

2641	Session Termination Threshold
2642	SSL_CIPHERSPECS is Defined
2643	SSL_SVR_LABEL is Defined
2644	SSL_VERSIONS is Defined
2645	Is Database Native Encryption enabled
2646	No Sample Database
2647	DB2 Communication Protocol SSL
2648	Password Encryption

CAS-based tests:

TEST_ID	TEST_DESC
570	Audit Data Path Permission
571	Log System Administrator Events
572	Log System Administrator Events - Windows

3) DB2 z/OS Security APAR Test Enhancement:

Any APAR tests relevant to DB2 z/OS versions 8 & 9 have been deprecated. All APAR tests that aren't deprecated will now use a SIA number. Customers may use this information in the DB2 z/OS security portal to find the APAR ID, description and remediation details.

All short descriptions for the APAR tests will use the text "Possible security vulnerability in DB2 for z/OS".

All APAR tests will use the recommendation: "To fix SIA-DB2-2017.7-1 go to the IBM Z Security Portal, check the z/OS and z/VM SIA Cross-Reference record for Guardium APAR information and apply all outstanding fixes. If you aren't registered for access to the IBM Z Security Portal, please see <https://www.ibm.com/it-infrastructure/z/capabilities/system-integrity>"

4) Patch Test Enhancement:

If the database version and patch level are equal or higher than the defined levels, the security assessment passes. Previously, it required an exact match. For more information, see [Modifying the database and patch level](#).

5) Oracle 18c

Guardium 10.6 supports the scanning of Oracle 18c on the Oracle cloud and on premise. CVE and patch test for Oracle 18c isn't supported.

Known Issues and Workarounds

Guardium Component	Bug #	Description
External S-TAP	GRD-21684	<p>If your site is deploying an External S-TAP to the Azure cloud (for a Microsoft Azure SQL database, make sure that the Azure SQL connection policy is set to “PROXY, rather than “REDIRECT” (the default). If set to REDIRECT, the External S-TAP can’t connect to SQL Server on Azure.</p> <p>Workaround:</p> <p>Azure users: If your site is deploying an External S-TAP to the Azure cloud (for a Microsoft Azure SQL database, make sure that the Azure SQL connection policy is set to “PROXY, rather than “REDIRECT” (the default).</p> <p>For information about how to change the connection policy, see the topic <i>Change Azure SQL Database Connection Policy</i> in the Microsoft Azure documentation.</p>
External S-TAP	GRD-22655	<p>If the SSL_VERSION of Oracle client and Oracle server don’t match, an error can occur that will terminate the connection.</p> <p>Workaround:</p> <p>Oracle users: Set both the Oracle client and server to TLS 1.2.</p> <p>Amazon RDS Oracle: To enable and set TLS for your database instance, add the SSL option to an Option Group, and apply the Option Group to your instance. Use the Oracle SSL “SQLNET.SSL_VERSION” option to specify the TLS version as one of the following: “1.0”, “1.2 or 1.0”, or “1.2”. The default SSL option is "1.0".</p> <p>For an Oracle on-premises instance:</p> <p>The TLS version is defined by the SSL_VERSION parameter in sqlnet.ora.</p> <p>If you’re using the Oracle JDBC Driver to connect to the Oracle database, set the TLS version with the oracle.net.ssl_version JDBC connection property. The default is "any", so you’ll need to specify the exact version, for example, "TLS 1.2".</p>
External S-TAP	GRD-24912	<p>External S-TAP When creating a certificate signing request (CSR), if the alias is longer than 20 characters the sniffer may not correctly transfer the CSR.</p>

		Workaround: Use an alias that is less than 20 characters.
GIM	GRD-20542	Windows GIM v10.5 requires reboot after uninstalling
Policy Builder	GRD-23030	<p>When a new session-level policy is installed from the Central Management page or Policy Builder for Data Page from a central manager on a managed unit, the GUI may display the sequence of installed policies incorrectly.</p> <p>As an example, a newly installed session-level policy would be displayed as the last installed policy after existing data-level policies if install last option is chosen. However, the actual sequence in which the policies are applied isn't affected. Session-level policies are always installed and applied before data-level policies.</p> <p>Workaround: To display the correct sequence in the GUI, install the policy from the Policy Builder for Data page from the managed unit.</p>
Policy Builder	GRD-22989	<p>This issue is specific to an environment where the central manager is v10.6 but the managed units are of a lower version.</p> <p>Policies affected:</p> <ol style="list-style-type: none"> 1) Data set collection profile 2) Db2 collection profile 3) Db2 z/OS blocking profile 4) IMS collection profile. <p>When these policies are installed in two ways – either directly on a managed unit or by using the grdapi command 'grdapi install_policy', the installation will go through, but the policies won't work.</p> <p>There are two workarounds:</p> <p>Solution 1: Apply Sniffer patch 4038 to managed units before installing these policies.</p> <p>Download the Sniffer patch here: https://ibm.biz/BdY5zv</p> <p>Solution 2: Install the policies from the Policy Builder for Data page or Central Management page in the GUI.</p>
Policy Builder	GRD-22555	<p>When importing policies from an earlier version of Guardium, the Criteria column of the Policy Rules panel may display settings that are inconsistent with the Rule Criteria panel settings for that rule. When this condition is present, the policy rules should behave as</p>

		<p>they did with the earlier version of Guardium when the policy was exported.</p> <p>Workaround: To correct the condition, edit the rule and set the affected criteria to its default value (or any appropriate value for the policy) and save the rule. After updating and saving the rule, the Criteria column of the Policy rules panel will match the Rule criteria panel settings.</p>
Query- Report Builder	GRD-20831	In the Build Expression dialog box that is used to create an expression for a query condition, "Save" doesn't work after clicking "Test".
CAS	GRD-20578	<p>Guardium Vulnerability Assessment CAS scripts for Sybase calls isql session with the -X option for initiating the login connection to the server with client-side password encryption. When the ASE environment settings aren't set or if they are incorrect, isql is unable to find the correct libraries and produces the error:</p> <p>CT-LIBRARY error: ct_connect(): protocol specific layer: internal Client Library error: There is a tds login error. The installed encryption handler returned a status that was not CS_SUCCEED.</p> <p>There are two workarounds:</p> <p>Solution 1: Edit the SYBASE.sh file under the Sybase instance account. Change: SHLIB_PATH="/home/sybase16/DataAccess64/ODBC/lib:/home/sybase16/DataAccess64/ODBC/dm/lib64" To: SHLIB_PATH="/home/sybase16/DataAccess64/ODBC/lib:/home/sybase16/DataAccess64/ODBC/dm/lib64":\$SHLIB_PATH</p> <p>Solution 2: Under the Sybase instance account, edit the .profile file to source both SYBASE.sh and SYBASE.env files. Make sure to source SYBASE.sh first, then SYBASE.env.</p>
CAS	GRD-23308	<p>If CAS is installed using GIM without configuring the now optional parameter CAS_SQLGUARD_IP, an error occurs.</p> <p>Workaround: When using GIM to install CAS clients from a central manager, you must assign the client to a managed unit using the CAS_SQLGUARD_IP parameter.</p>

Sniffer	GRD-21438	<p>Defining a custom alert message subject line using the %%subject[] variable does not work with the default message template specified at Setup > Tools and Views > Global Profile.</p> <p>Workaround: To create an alert message with a custom subject line, use the %%subject[] variable in a named template.</p>
REST API	GRD-17173	<p>This issue is specific to an environment where the central manager is v10.6 but the managed units are of a lower version.</p> <p>On a site that uses Guardium REST APIs, the same client secret can't be used between upgraded central managers and older managed units.</p> <p>Workarounds:</p> <p>Solution 1: Use client_secret directly from the central manager or register a new client for each managed unit that is connected to the central manager.</p> <p>Solution 2: Use the GuardAPI register_oauth_client CLI command. Example: cli>grdapi register_oauth_client client_id=client_id1 For more information on this command, see Guardium REST API.</p>
Health Analyzer	GRD-22939	<p>This issue is specific to the Health Analyzer running on a central manager or aggregator. The Analyzer doesn't identify or send alerts when sizes of databases or files on disk (/var) might potentially exceed the limit of 50 percent in the next 14 days.</p>
Classifier	GRD-24473	<p>This issue is specific to a Guardium-generated GDPR discovery scenario.</p> <p>When classification rules are filtered by a specific language using the language drop-down menu, the filter doesn't work as expected. As an example, when French is selected from the drop-down menu, the classification rules appear to be filtered. However, when you run the scenario, the results aren't filtered.</p> <p>Workaround:</p> <p>To filter by a specific language, follow these steps:</p> <ol style="list-style-type: none"> 1. In the Discover Sensitive Data page, delete all existing rules from the "Selected Classification Rules" section. 2. Use the filter in the "Classification Rule Templates" section to filter rules for a specific language 3. Move the filtered rules to the Selected Classification Rules table

		4. Repeat for each language, as needed
Audit Process Builder	GRD-14726	<p>This issue is specific to the task types: Report, Privacy Set and Entity Audit Trail. It occurs in a scenario where more than one task is defined in the audit process.</p> <p>In the task parameters section of a new task, the “off” option of the show aliases radio button (SHOW_ALIASES) doesn’t work as expected.</p> <p>As an example, when you run a report with Aliases turned off, the results are displayed for aliases rather than original values.</p> <p>Workaround: On the results page, use the radio buttons “Show Original Values” or “Use Aliases” to filter results as needed.</p>
Backup and restore	GRD-24450	<p>When backup restore process is completed using the CLI command <code>background restore db-from-prev-version</code>, you must manually restore both the current appliance IP and System Host Name using the CLI commands: <code>store network interface ip <x.x.x.x></code> and <code>store system hostname <hostname></code></p>
Data Protection Dashboard	GRD-23085	<p>The drag and drop feature on the Guardium Data Protection Dashboard only allows dragging to the right.</p> <p>Workaround: instead of dragging to left, drag to right so that the right-hand graph shifts to the left.</p>
Investigation Dashboard	GRD-22513	<p>Investigation dashboard doesn’t work on IE 11.</p> <p>Workaround: open the Investigation dashboard in a supported browser.</p>
External Feed/System	GRD-20797	<p>When running high-load concurrent processes, there’s a race condition where date and time fields could be incorrectly updated.</p> <p>Workaround: This is a rare condition. Until the fix is introduced, customers who experience this issue can avoid running these processes concurrently: external feeds, reports, audit processes. This will be fixed in post 10.6 bundles.</p>
UNIX S-TAP	GRD-19047	<p>When running the OS command <code>nzrestore</code> with Log Full Details Guardium policy action on the user only logs session start and end. This is because Netezza DB doesn’t support IPC traffic.</p> <p>Workaround: Add another IE with PGSQL as db-type and <code>intercept_type=npipe</code>. For example, if Netezza IE is: [DB_1] <code>connect_to_ip=127.0.0.1</code></p>

		<pre> db2_fix_pack_adjustment=20 db2_shmem_client_position=0 db2_shmem_size=131072 db2bp_path=NULL db_exec_file=/nz/kit.7.2.1.0/sbin/postmaster db_install_dir=/export/home/nz db_type=PGSQL encryption=0 db_version=7 instance_running=1 intercept_types=npipe load_balanced=1 port_range_end=5480 port_range_start=5480 priority_count=20 real_db_port=5480 tap_identifier=netezza_72nzsimbeta(5480,5480,DB_0) tee_listen_port=0 unix_domain_socket_marker=NULL networks=0.0.0.0/0.0.0.0 exclude_networks= Copy the existing IE, change DB_TYPE=PGSQL, and intercept_types=npipe. </pre>
Ecosystem	GRD-22486	<p>Due to third-party library updates, Ecosystem applications previously installed on a v10.5 Guardium appliance will be incompatible with v10.6 when upgrading to GPU 600, resulting in the applications being permanently disabled.</p> <p>Applications previously installed on v10.5 must be reinstalled after installing GPU 600. Note: Application data won't be preserved.</p> <p>The installation of new applications on a v10.6 Guardium appliance isn't affected.</p>
Solr	GRD-24444	<p>Quick Search may not work after switching from a Central Manager to a Backup Central Manager.</p> <p>Workaround: Restart the GUI on the Central Manager first. After it's up, restart it on all the Managed Units. Once this is done, the search data from before switch becomes visible and new data is indexed.</p>

Changes in API Behavior

This section reflects changes in API behavior from previous Guardium releases.

Changes in API/Entity	Description of changed behavior
<p>gim_uninstall_module</p> <p>Older Guardium versions: REST_VERB: GET</p> <p>Update in 10.6: REST_VERB: DELETE</p>	<p>The REST verb for the API gim_uninstall_module has changed from GET to DELETE. Any code that uses this API function must be modified to the new REST verb.</p>
<p>GIM Modules Heartbits</p> <p>Older Guardium versions: entity = GIM Modules Heartbits table = GIM_MODULES_HEARTBITS</p> <p>Update in 10.6: entity = GIM Modules Heartbeats table = GIM_MODULES_HEARTBITS</p>	<p>When using Guardium APIs to reference the entity label "GIM Modules Heartbeats, use the table name GIM_MODULES_HEARTBITS.</p> <p>For example: grdapi create_computed_attribute attributeLabel="Module Status" entityLabel="GIM Modules Heartbeats" expression="IF(GIM_MODULES_HEARTBITS.GIM_LAST_UPDATE>date_add(CURRENT_TIMESTAMP,INTERVAL -1 HOUR),'UP','DOWN')"</p>
<p>Older Guardium Versions: grdapi set_classification_concurrency_limit grdapi get_classification_concurrency_limit</p> <p>Update in 10.6: grdapi set_job_process_concurrency_limit grdapi get_job_process_concurrency_limit</p>	<p>The Vulnerability Assessment multi-threading feature now supports both classification and assessment.</p> <p>The new Guardium API command "set_job_process_concurrency_limit" defines the number of assessment <i>and</i> classifier processes that can run concurrently.</p>

Bug Fixes

Issue Key	Summary	APAR
GRD-7686	Follow up RTC 41180 SAP app user name truncation	
GRD-10355	GIM install should not change permissions on /etc/inittab	GA16382
GRD-11080	Trusted Apps not always showing with Ignore STAP Session	GA16507
GRD-13332	Guardium agents doesn't start after the server gets rebooted	GA16452
GRD-13821	KRB_* parameters should not be set	GA16566
GRD-14803	must gather system_output.txt misleading - "Output of Checking Total Memory" - and states "Total RAM Memory of the appliance" is "in the required range" when it isn't	GA16531
GRD-15270	Possible Security problem - http status 403 - use a risk analysis tool - change the HTML "Get" Method function to "Options" Method - can be used by attacker	GA16530
GRD-15507	New GIM "Setup up by Client" application does not allow Cancell Uninstall button to clear "failed installation" status	GA16534
GRD-15676	Questionable (wrong) join in Analytics domain between entitles: analytic outlier and analytic outlier	GA16476
GRD-15677	Export csv in investigation dashboard functionality	GA16474
GRD-15679	Enterprise Load balancer doesn't relocate STAPs, that have more than one Sqlguard IP.	GA16580
GRD-15786	snif.log 1000s messages (related to STAP LB) that monitors sniff liveness by opening a connection (and then closing it)	
GRD-15969	email send not working	GA16486
GRD-16070	Only the admin user can see VA Test domains	GA16601
GRD-16077	equifax_secure_certificate_authority cert expires on all appliances in 6 months(ie. Aug 22)	GA16426
GRD-16096	Unable to add MySQL IE after Win STAP upgrade to 10.2.40.68 (collector is 10.1.2)	GA16597
GRD-16105	Request Timeout Params for Hung Datasources during Custom table data upload	GA16575
GRD-16322	STAP_r102728 suspected of causing kernel panic	GA16355
GRD-16356	Amazon S3 configuration not saving for data archive nor system backup	Doc Update
GRD-16460	Time Period data from customers is distributed to all customers	GA16328
GRD-16524	Guardium Appliances are running at TSM Client Level 7.1.6.2	GA16468
GRD-16631	The function create_member_to_group_by_desc don't handle "registered trademark symbol (R)" or "copyright symbol (c)"	GA16332
GRD-16794	Some of Windows S-TAP must gather files are missing when trying to get them from GUI	
GRD-16840	10.1.4 REST enable test_datasource_connection	GA16365
GRD-17039	Guardium and GreenplumDB for versions 4.3.8.1 and 4.3.22.1	GA16470
GRD-17241	Aggregation Performance Issue	GA16522

GRD-17247	Scheduled Job DREP stuck in IN_TRANST or ERROR state due to SCP error	GA16565
GRD-17316	cleanup_oldfiles.sh via cron fails because of an incorrect FIND command	GA16501
GRD-17455	Multiple gim_xxx.conf files in /etc/init will not allow GIM to start	
GRD-17573	10.1.4 Group Builder (Legacy) Group Member Addition Inconsistency [“DIP”] instead of ["DIP"].	GA16520
GRD-17630	I would want a CLI command to set MaxMessageSize to whatever in rsyslog.conf	GA16536
GRD-17679	Post Installing VMWARE_TOOLS, the services on appliance did not start automatically	GA16521
GRD-17703	system messages not being written to syslog	GA16559
GRD-17785	STAP is somehow slowing down Batch and ETL jobs in Teradata environment	GA16589
GRD-17805	Cannot reset accessmgr password using <N> in 10.1.4	GA16368
GRD-17843	DB Name is Null when login failed in MSSQL 2014(with V9 WINSTAP)	GA16374
GRD-17865	Guardium v10.1.4 STAP/KTAP Logs Filling DB Root Partition	GA16489
GRD-17886	(Enhancement) Zip diagnostic files before sending to the collector	
GRD-17910	CORRELATION_TIMEOUT parameter can't be seen in grdapi	
GRD-17912	User Audit trail doesn't reflect changes to ACCESS_RULE_ACTION entity	GA16358
GRD-17919	grdapi add_assessment_test failing because of comma in predefined test name	GA16592
GRD-17920	VA grdapi update_assessment_test should allow update to the "exceptionsGroup"	GA16591
GRD-17925	Guardium STAP/KTAP Logs Filling DB Root Partition	GA16564
GRD-17975	Import failed Error: Day cannot be imported twice	GA16621
GRD-18045	Problems importing from external datasource via group builder	GA16582
GRD-18203	STAPs point to collector as Enterprise Load balancer	GA16579
GRD-18213	Guardium STAP using high CPU	GA16587
GRD-18215	STAP_r102728 suspected of causing kernel panic	GA16478
GRD-18226	Table optimization fails	GA16490
GRD-18301	Aliases in audit report result in GUI and the export of the same audit report result in PDF, or CSV file does not match.	GA16446
GRD-18364	SQL comments that can execute hidden selects etc isn't logged for MySQL and mariadb	GA16370
GRD-18395	3-digit octal number (#012 #011) in syslog after upgrading to p400	GA16360
GRD-18408	DB2 Exit seems to append chars to DB User	GA16453
GRD-18490	Remove tls-decrypt cli commands	GA16485
GRD-18611	STAP crash : ANOM_ABEND comm="guard_stap" reason="memory violation" sig=11	GA16505
GRD-18616	7 tuple isn't available in client server entity through custom domain	GA16372

GRD-18676	How to install custom CAS certificate	GA16386
GRD-18894	Vulnerability Assessment test giving false negatives	GA16469
GRD-19002	Group name is replaced with GROUP_ID after clone with "NOT LIKE GROUP"	GA16600
GRD-19135	Reason For Huge Traces of "ERROR: process_krb_token() tobuf_len is 0" from STAP	GA16422
GRD-19169	Request was interrupted or quota exceeded	GA16537
GRD-19195	V10.1.4 MongoDB 3.6.5 A-TAP Activation & Encrypted Traffic Issue	GA16451
GRD-19196	Details attribute is cut in predefined Classification Process Log report	GA16224
GRD-19296	VA Test for SYBASE IQ, Locked accounts, is throwing an Error even when on SYBASE IQ 16.0	GA16573
GRD-19460	grdapi command fails with Err=2410 for the used expression	GA16558
GRD-19509	Using full hostname when installing bundle STAP not working	GA16514
GRD-19640	Sybase IQ setup with ATAP may become unresponcive or even crash	GA16547
GRD-19671	System CPU% and System Idle CPU% are 0% in the UNIX STAP Statistics report	GA16380
GRD-19719	Improve removing red STAPS from original MU in Enterprise Load Balancer environment to get rid of false red staps	
GRD-19791	GIM fails to install because of tapip issue	GA16473
GRD-19851	Auditprocess entry with new tomcat process id added	GA16479
GRD-19902	Audit process aliasing isn't shown in the syslog	GA16481
GRD-19993	V10.5 ALERT BUILDER "Message Template" and "Central Manager" modification changes do not get retained	GA16390
GRD-20048	Custom Upload of GDM_STATISTICS pulls the wrong hours.	GA16571
GRD-20081	Scheduled Tomcat restart does not honor schedule	GA16496
GRD-20095	Does Guardium support 'store network dhcp' on VMware ESX Server?	GA16403
GRD-20097	query about ktap_fsmon_buffer_size parameter	GA16393
GRD-20102	Computed attribute content isn't properly displayed in Guardium	GA16542
GRD-20228	Data Protection Dashboard, unable to drop visualizations on Firefox & Chrome	GA16483
GRD-20313	Built-in report "Installed Policy Details" fails to run as an Audit task	GA16500
GRD-20424	Outer Join isn't properly handled within custom domain functionality	GA16215
GRD-20443	grdapi will not add members to a group if the name has a + in it	GA16440
GRD-20476	stap upgrade fails for UNIX dbservers when STAP_TAP_IP is hostname	GA16471
GRD-20507	User cannot view audit process results when a report is used. Same role CAN see results if Security Assessment is used	GA16602
GRD-20615	installdir and port isn't correct after installation of stap.	GA16535

GRD-20622	Classification policy created by grdapi not working GPU 500	GA16509
GRD-20653	Audit Process Report gets completed but not able to download results as PDF	GA16524
GRD-20654	Instance discovery creating incorrect IE for Oracle	GA16448
GRD-20673	guard_diag does not contain guard_discovery.stderr.log	GA16484
GRD-20810	Sometimes ADMINCONSOLE.txt in mustgather does not contain data	GA16590
GRD-20909	Audit Process Builder "Schedule by Month" options merged into one on v10.1.4 and v10.1.5 - Japanese only	GA16429
GRD-20925	Aggregation/Archive Log Details cannot be viewed even when role grants the Errors Report accessible	GA16513
GRD-20969	Reporting issues custom query result count less than collector	GA16554
GRD-21215	The "export file" cli command is unable to process must_gather files, failing with error "ERROR: No exporting of system files."	GA16435
GRD-21366	INCONSISTENT SERVER_HOSTNAME in GDM_ACCESS. Column Cannot be used in reports	GA16427
GRD-21401	Duplicate entry error on inserting to GDM_SESSION_LIVE	GA16433
GRD-21539	Core Dump errors generated over AIX Server, v10.1.4	GA16447
GRD-21598	Java heap space issue for audit process with large result set	GA16482
GRD-21855	S-Tap causing server crash	GA16447
GRD-22094	Aggregation/Archive Errors alert will alert on an informational message	
GRD-22174	S-TAP Info (STAP_INFO) Custom Table's Purge is set to the default (0 months) after patching (P4035 / P505).	GA16523
GRD-22257	STAP beta version for Cassandra Encrypted Compressed Traffic	GA16506
GRD-22462	VA MS SQL Server "DDL granted to user"	GA16519
GRD-22481	Session Start / Session End (maybe others) are missing in list of main entities in access domain	
GRD-22524	Persistent Cross-Site Scripting (XSS) User login request issue PSIRT 123872	GA16529
GRD-22553	Need to monitor usage of soft limits	GA16562
GRD-22606	System Shared Secret and Clear text password isn't encrypted in GUARD_USER_ACTIVITY_AUDIT	
GRD-22667	RestAPI gim_uninstall_module command record contains incorrect REST_VERB	GA16487
GRD-22707	Group Builder doesn't treat Qualified Object properly	GA16488
GRD-22976	Cannot connect to DB after ATAP configuration	GA16494
GRD-23023	Discrepancy between audit jobs on CM and child aggs	
GRD-24901	External S-TAP: Cannot connect to collector with S-TAP Certification enabled	

Security Fixes

Issue Key	PSIRT ID	CVEs	Description
GRD-12880	104194	CVE-2011-5320 CVE-2017-15670 CVE-2017-15671 CVE-2017-15804	Using components with Known Vulnerabilities (GNU glibc)
GRD-13967	121593	CVE-2015-5237 CVE-2017-3162 CVE-2017-3161 CVE-2017-15713 CVE-2016-6811 CVE-2016-5001 CVE-2014-3627 CVE-2014-0229	Using Components with Known Vulnerabilities (hadoop-auth)
GRD-16260	101242	CVE-2017-1597	GUI user password compliance
GRD-16651	115679	CVE-2018-8012	Using Components with Known Vulnerabilities (Zookeeper)
GRD-17173	113327	CVE-2018-1498	Password in clear text vulnerability
GRD-17187	113378	CVE-2015-3254	Using components with Known Vulnerabilities (libthrift)
GRD-17205	113379	CVE-2015-3254	Using components with Known Vulnerabilities (libfb)
GRD-17206	113382	CVE-2018-1509	Improper Certificate Validation Vulnerability
GRD-17945	No PSIRT ID	CVE-2017-3145	Using Components with Known Vulnerabilities (BIND)
GRD-17946	121640	CVE-2018-5733, CVE-2018-5732	Using Components with Known Vulnerabilities (DHCP)
GRD-17948	121637	CVE-2017-5715	Using Components with Known Vulnerabilities (microcode_ctl)
GRD-20803	121263	CVE-2018-1817	Cross-Site scripting Vulnerabilities
GRD-20821	121633	CVE-2018-1284 CVE-2018-1282 CVE-2016-3083	Using Components with Known Vulnerabilities (Hive-exec)

GRD-20822	121635	CVE-2018-1000156	Using Components with Known Vulnerabilities (patch)
GRD-20847	121264	CVE-2018-1818	Use of Hard-coded Credentials Vulnerability
GRD-20891	120981	CVE-2017-5715, CVE-2017-5753, CVE-2017-5754, CVE-2018-1000156, CVE-2018-8897, CVE-2017-1000410, CVE-2017-13166, CVE-2017-7645. CVE-2017-8824. CVE-2017-18017, CVE-2018-3639, CVE-2018-1124, CVE-2018-1126, CVE-2017-8890, CVE-2018-3639, CVE-2018-1130, CVE-2017-18203, CVE-2017-15121, CVE-2017-12190, CVE-2017-9077, CVE-2017-9076, CVE-2017-9075, CVE-2018-5803, CVE-2017-7616, CVE-2017-7308, CVE-2017-6001, CVE-2017-2671, CVE-2016-8650, CVE-2015-8830, CVE-2012-6701, CVE-2017-7889, CVE-2018-3665, CVE-2018-3639, CVE-2018-10675, CVE-2018-1000004, CVE-2018-7566, CVE-2018-3693. CVE-2018-3646. CVE-2018-3620. CVE-2017-15265. CVE-2017-0861. CVE-2018-10901	Using components with Known Vulnerabilities (kernel)
GRD-21709	121638	CVE-2018-1126 CVE-2018-1124	Using Components with Known Vulnerabilities (procs)
GRD-22524	123872	CVE-2018-1889	Cross-Site scripting Vulnerabilities
GRD-22645	123879	CVE-2018-1891	Cross-Site scripting Vulnerabilities
GRD-2468	91258	CVE-2016-1181 CVE-2016-1182	Using components with Known Vulnerabilities (Apache Struts)
GRD-4187	93726	CVE-2017-1268	GUI user password strengthening
GRD-4448	93730	CVE-2017-1272	Query Parameter in SSL requests Vulnerability
GRD-6202	93723	CVE-2017-1265	Improper Certificate Validation Vulnerability

GRD-7630	91252	CVE-2015-0899	Using components with Known Vulnerabilities (Apache Struts)
GRD-7630	98818	CVE-2016-3092 CVE-2014-0114	Using components with Known Vulnerabilities (Apache Struts)
GRD-8563	121634	CVE-2017-15670 CVE-2017-15804	Using Components with Known Vulnerabilities (glibc)
GRD-9934	101242	CVE-2017-1597	GUI user password strengthening

Releases for v10.0 since v10.5

Patch#	Bug #	APAR	Description
V10.0p505			Link to release notes: https://delivery04.dhe.ibm.com/sar/CMA/IMA/07obe/0/Guardium_v10_0_p505_Bundle_release_notes.pdf
V10.0p508	GRD-19051		Fix Instance of Alert Builder does not allow creating a custom threshold
V10.0p509	GRD-18890		Guardium Data Set Collection Profile Policy hitting group limit of 1488
V10.0p510	GRD-20845		Alerter Fixes: <ul style="list-style-type: none"> • Fixed instance of Alerter sending one message per polling interval • Fixed instance of Alerter marking messages as FAIL in error • Fixed instance of Alerter performance issues due to an extra mysql query
V10.0p512	GRD-13356		A manual snmpd restart is required to obtain extOutput.2 metric successfully post appliance reboot
	GRD-14415		10.1.4 Classifier job halts after 1-2 hours
	GRD-16077	GA16426	equifax_secure_certificate_authority cert expires on appliances on Aug 22
	GRD-17094		Classification scan with Netezza data sample size of 2000 and sample type Random issue
	GRD-17563	GA16431	Security Assessment DataSource for MongoDB replica sets should auto detect primary instance.
	GRD-17753	GA16356	Mysql Disk Usage shows different value on GUI and CLI
	GRD-18301	GA16446	Aliases in audit report result in GUI and the export of the same audit report result in PDF, or CSV file does not match.
	GRD-18622		TTY respawn syslog messages still shows up in syslog even after "store system serialtty off"
	GRD-18824	GA16444	Schedule Job Exception: The current column selected for the query is no longer valid.
	GRD-19096		Custom template isn't stored in alert builder

Patch#	Bug #	APAR	Description
	GRD-19441	GA16376	System Backup fail - 'ERROR: Backup file was not copied. Method=SCP'
	GRD-19460		grdapi command fails with Err=2410 for the used expression
	GRD-19993	GA16390	ALERT BUILDER: "Message Template" and "Central Manager" modification changes do not get retained
	GRD-20424		Outer Join isn't properly handled within custom domain functionality
	GRD-20443	GA16440	grdapi will not add members to a group if the name has a + in it
V10.0p513	GRD-22118		v10p512 fails to authenticate when LDAPS is used to authenticate users
V10.0p514	GRD-21538	GA16456	Classifier data scan does not match Netezza tables
V10.0p515	GRD-21798		Incident generation isn't generating the INCIDENT sometimes
V10.0p516	GRD-13921		AMI Support

Sniffer Updates since v10.5

Latest sniffer patch included in GPU 600: v10.0 patch 4040

Notes:

Installation of sniffer patches must be scheduled during a "quiet" time on the Guardium appliance to avoid conflicts with other long-running processes (such as heavy reports, audit processes, backups, imports and so on).

Installation of sniffer patches will automatically restart the sniffer process.

If the downloaded package is in .zip format, customers are required to unzip it outside the Guardium appliance before installation.

Universal sniffer patch can be installed on top of any GPU starting with v10.0 patch 100 or higher.

If there's a failure to install, the following error message will display:

ERROR: Patch Installation Failed - Incompatible GPU level. GPU p100 or higher required.

This sniffer patch should be installed across all the appliances: central manager, aggregators and collectors to avoid aggregator merge issues.

Important: Any superseding sniffer or security patches must be reinstalled after installing GPU 600.

Sniffer Update	Bug#	APAR	Description
4033			Link to patch 4033: https://delivery04.dhe.ibm.com/sar/CMA/IMA/07kr3/0/Guardium_v10_0_p4033_sniffer_update_release_notes.pdf
	GRD-12713		Sniffer change to address quotes in objects generate duplication in reporting
	GRD-15806	GA16307	p4030 does not record RESPONSE_TIME
	GRD-16047	GA16508	Sniffer Restarts due to being killed by SEGV Signal on Sniffer p4030
	GRD-16355	GA16353	v10 Guardium report incorrectly shows Full_SQL.Succeeded=1 for the first SQL statement in a batch of SQL that all fail - for MSSQL SERVER MANAGEMENT STUDIO
	GRD-16396	GA16352	Double Quotes within DB User cause policy not to match
	GRD-16918	GA16533	"Records Affected -1" for Oracle WITH clause
	GRD-16924	GA16518	Siebel Application User Translation not working as expected.

	GRD-17585	PI97785	SQL Alter Procedures Not Captured after v10.1.4 Snif 4031 installation on UDB Server
4034	GRD-17456		Implement masking of sensitive data in exceptions by pattern - sent to alert
	GRD-17861	GA16414	Fix Different CEF Behavior for Alert Per Match and Alert Only
	GRD-14377		Implement masking of sensitive data in exceptions by pattern
4035	GRD-13703	GA16292	Alert CEF template variable values need to escape backslash
	GRD-15737	GA16539	Large number of Netezza parser errors in GDM_ERROR table resulting in DB full
	GRD-17312	GA16384	Login failed exceptions not captured with selective audit policy on p4029
	GRD-17755	GA16400	Collector not logging the PostgreSql "ALTER SYSTEM" command SUP-4031
	GRD-17910		CORRELATION_TIMEOUT parameter can't be seen in grdapi
4036	GRD-17786		Incorrect mapping of Cloudera events to Guardium fields
4037	GRD-20312	GA16516	Excessive rows generated on GDM_FIELDS
	GRD-20304	GA16511	Cassandra 3.11 database session traffic causing sniffer crash issue
	GRD-20083	GA16401	object for the DROP TRIGGER sql for MSSQL is not parsed
	GRD-12206	GA16407	Mongodb with sniffer p4029 db_user = NO_AUTH
4038	GRD-13779	GA16394	Capture Netezza session information
	GRD-16972	GA16598	Sniffer crashing "stuck condition = timestamp"
	GRD-19094	GA16437	SQL Server Create Function logs two statements rather than a single statement
	GRD-19566	GA16599	Netezza GRANT statements showing in GDM_ERROR
	GRD-19571	GA16450	Grant statements not being logged by Guardium in Oracle multitenant environment
	GRD-20130	GA16512	No traffic from KAFKA for Cloudera Hadoop
	GRD-20835	GA16449	Query rewrite of a column isn't working if you got convert statement before it
	GRD-21401	GA16433	Duplicate entry error on inserting to GDM_SESSION_LIVE
4039	GRD-20130	GA16512	Additional improvements for capturing traffic from KAFKA for Cloudera Hadoop
4040	GRD-23277		CouchDB shows that DB_USER has changed to the wrong value.

New Platforms and Databases supported in v10.6

New Support for UNIX S-TAP

Platforms

Ubuntu 18

Databases

PostgreSQL 9.6

PostgreSQL 10

Oracle 18

MongoDB 4

Teradata 16.1

Teradata 16.2

Cloudera 5.12

Hortonworks 2.6

SAP HANA V2 SPS02

Aster DB 6.2 (no encryption support)

Greenplum 5.7

New Support for Windows S-TAP

Databases

MongoDB 4

MSSQL 2017

Oracle 18

PostgreSQL 9.6

PostgreSQL 10

Deprecated Functionality

Legacy query builder and report builder are replaced by new query-report builder.

Classification policy builder and classification process builder are deprecated and replaced by discover sensitive data scenario.

Baseline, AME, windows file monitor, capture/replay and access map.

Additional Resources

IBM Security Guardium Knowledge Center and online help

http://www-01.ibm.com/support/knowledgecenter/SSMPHH/SSMPHH_welcome.html

REST API and GuardAPI reference

[Guardium API A-Z Reference](#)

System Requirements and Supported Platforms v10.6

<https://www-01.ibm.com/support/docview.wss?uid=ibm10719695>

Software Appliance Technical Requirements v10.6

<https://www-01.ibm.com/support/docview.wss?uid=ibm10744773>

IBM Security Learning Academy

See securitylearningacademy.com for learning more about Guardium.

Flashes and Alerts for IBM Security Guardium

<https://ibm.biz/BdY5fe>

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